



Patent
Attorney's Docket No. 000500-196

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of)

Eva SIMMONS et al.)

Application No.: 09/380,208)

Filed: November 8, 1999)

For: ABSORBENT ARTICLE THAT)
INCLUDES A LIQUID BARRIER)
WITH IMPROVED SEALING)

Group Art Unit: 3761

Examiner: M. KIDWELL

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DECLARATION UNDER 37 C.F.R. § 1.131

Assistant Commissioner of Patents and Trademarks
Washington, D.C. 20231

Sir:

We, Eva Simmons, Peter Rönberg and Anders Gustafsson declare that:

1. We are the inventors of the subject matter disclosed and claimed in the above-referenced patent application.

2. We are familiar with U.S. Patent No. 6,156,024 (attached hereto as Exhibit A), filed December 3, 1996, and issued December 5, 2000. The present application was filed November 8, 1999, prior to the issuance of the '024 patent. Thus, no statutory bar exists regarding the '024 patent and this Declaration is appropriate under 37 C.F.R. § 1.131.

3. The claimed invention was reduced to practice in Sweden, a WTO country, prior to December 3, 1996, the filing date of the '024 patent. No reliance on any reduction to practice of the claimed invention prior to January 1, 1996, is asserted.

4. Prior to December 3, 1996, a description of the claimed invention was provided to a patent advisor for the applicant of the above-identified patent application, who forwarded

the information to Swedish patent counsel. The order letter, in Swedish, and dated prior to December 3, 1996, describes the invention claimed in the above-identified patent application.

An English translation of the relevant part of the letter is as follows:

The first invention,...[is] sealing the part of the absorbent product abutting the user so that the seal can withstand a given pressure measured in e.g. mm water column. The pressure is related to the elongation of the sealing barrier and this relationship will be determining. If the elongation is increased the sealing effect will of course be improved for all kinds of sealing means. However, the comfort is reduced at the same time. The project group has made a number of measurements and theoretical evaluations where materials, pore sizes, elongations, wetting angles, etc., are included.

5. Prior to December 3, 1996, the claimed invention was reduced to practice, as evidenced by Exhibit B, which is a redacted copy of three pages of equations detailing the reduction to practice of the invention. Specifically, these pages illustrate the claimed invention comprising modifying or treating the absorbent article in such a way as to cause the absolute value of $\Delta P = 2\gamma \cos\theta_m / r$ for the sealing edge to increase, where γ designates the surface tension of the liquid to be absorbed by suction, r designates the radius of the largest circle that can be encompassed in any pore formed by the sealing edge against the wearer's skin at the given available elongation, and $\cos\theta_m$ is the weighted mean value of $\cos\theta$, where θ is the wetting angle of the liquid to the sealing edge or the skin.

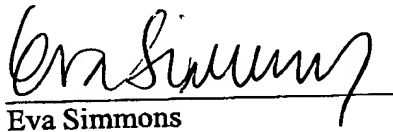
As shown on the pages of Exhibit B, formulas were used to calculate ΔP . The pore radius was measured using an electron microscope to find the distance between the barrier and the Plexiglas used in the measuring equipment. The wetting angle (θ) was determined and a mean value of θ was calculated since there was more than one material and the materials had different wetting angles.

6. Exhibit C contains four pages of graphs dated prior to December 3, 1996, which illustrate the claimed invention. Each graph shows mm H₂O vs. available stretch. The graph entitled Diagram 2 is directed to Huggies new wetting angle experimental data/calculated data. As shown, the ♦ represents Huggies new wetting angle experimental and the ■ represents Huggies new wetting angle calculated.

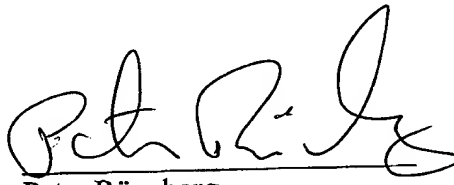
7. Exhibit D contains redacted copies of four pages of a protocol from a meeting of a Steering Committee which took place in Sweden prior to December 3, 1996, further describing the features of the claimed invention. In these pages, "hud" means "skin", "tätning" means "seal" and "VP" equals "water pressure".

8. We hereby declare that all statements made herein of our own knowledge are true and that all statements made upon information and belief are believed to be true; and further that these statements and the like so made are punishable by fine or imprisonment, or both, under 18 United States Code section 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: 1/3/02


Eva Simmons

Date: 4/3/02


Peter Rönnberg

Date: 6/3/02


Anders Gustafsson